

Abstract

Frequency corrections made by a clock and data recovery phase-lock loop are monitored. For each of a number of time periods, the numbers of up and down frequency corrections that were made by the phase-lock loop during the time period are netted together. One or more operating indications are then derived from the net numbers. The operating indications may include: an indication of whether any net number is non-zero, an indication of whether any net number exceeds one or more thresholds, the value of one or more maximum net numbers, and/or the values of all net numbers. In one embodiment, operating indications are output to built-in self-test hardware. By way of example, the operating indications can be used to infer the existence and/or magnitude of anomalous events in 1) the phase-lock loop, or 2) the data that is being recovered under control of the phase-lock loop.